is oval and bears two denticles on the side which faces the opposable tooth. The sixth pair of thoracic limbs, which is so important in characterizing the *Entonisci*, in no way resembles those of the known species. It is composed of five joints: that which corresponds to the hand of the other pairs is more elongated, and terminates at its inner margin in a small fixed tooth; its external margin is produced into a straight bacillus, as long as the joint which bears it, and furnished at its extremity with a tuft of rigid hairs.

The five pairs of abdominal limbs are all constructed in the same fashion. The terminal setigerous joint presents a straight margin which bears two rays; a third is inserted at the extremity. The heart is situated at the dorsal part of the first abdominal segment; it is found in the same place in the adult, where it never projects into a sac as in *Entoniscus porcellanæ*.

These embryos live very well in sea-water, in which they swim in the manner described by Fritz Müller,—that is to say, with the body bent towards the ventral side and the sixth pair of thoracic legs projecting on each side.

The second species that I have observed is much rarer. It lives as a parasite in *Portunus puber*; and whereas one may meet with an *Entoniscus Cavolinii* in about every thirty specimens of the *Grapsus*, the parasite of the Velvet-Crab does not occur in the proportion of more than 1 per cent. Moreover I have observed the latter only in *Portuni* collected at the island of Leven, opposite the point of Pen-Château. I have found two in the same *Portunus*. This species I name *Entoniscus Moniezii*, dedicating it to my preparator, R. Moniez.

E. Moniezii differs from *E. Cavolinii* in the colour of its ovigerous sac, which, at maturity, is of a nankeen-yellow colour, and not lead-grey as in the parasite of the *Grapsus*. The ovarian gland is yellow with a rose tinge; it is straw-yellow in *E. Cavolinii*. A female of *E. Moniezii* not yet entirely degraded has enabled me to study more thoroughly the phenomena of retrogression presented by these Isopods. The description of these phenomena will form the subject of a detailed memoir, in which I shall also indicate the taxonomic results which I have obtained by the study of the Isopoda of the family Bopyridæ.—*Comptes Rendus*, August 12, 1878, p. 299.

Note on the Saurus lucioceps *of Ayres.*

By W. N. Lockington.

Saurus lucioceps, Ayres, Proc. Cal. Acad. Sci. 1855, p. 69.

Saurus fœtens?, Cuv. & Val. xxii. p. 471 (*teste* Günther).

A large specimen of the fish described by Dr. Ayres was presented to the California Academy of Sciences, August 19, 1878, and has been examined by Mr. W. G. W. Harford, the Director of the Museum, and myself.

The result of our examination leads us to suspect that possibly *Saurus fœtens* and *S. lucioceps* may prove identical, as some of the characters which distinguished the young specimen of the latter (6 inches long), described by Dr. Ayres, from the former species disappear in the larger one now brought under our notice.

Dr. Ayres states that the lower jaw is the longer; but his type has the lower jaw somewhat shorter than the upper, as has also the large specimen.

The interorbital space in the young specimen is equal to the longitudinal diameter of the eye; but in the large individual, owing chiefly to the greater development of the upper orbital margin, the interorbital space is equal to once and a half the longitudinal orbital diameter. The proportion of the head to the body in both specimens is about as two to nine; and the fin-rays in both agree with Ayres's description.

The only characteristics which still lead us to doubt the identity of *S. fœtens* with *S. lucioceps* are the proportion of the head to the body, and the number of the scales in the lateral line, which in the large specimen is not less than 75, instead of 65 as in *S. fœtens*.

Probably the shortness of the lower jaw is caused by contraction in alcohol. Dr. Ayres always purchased and described fishes in their fresh condition; and doubtless the lower jaw, now the shorter, was slightly the longer when he described it.

The donor of the specimen, Dr. Trask, states that the fish is scarce, and that in 1873 it appeared off this coast, but the individuals were no larger than a sardine.

Length to tip of caudal fin 1 ft. $5\frac{3}{4}$ in.; width of interorbital space 1 in.; from tip of snout to eye $1\frac{1}{8}$ in.; longitudinal diameter of orbit $\frac{5}{8}$ in., ditto to first dorsal $6\frac{1}{2}$ in., ditto to pectorals $3\frac{7}{8}$ in.

Locality. Santa Cruz.

San Francisco, Aug. 21, 1878.

On the Causes of the Buzzing of Insects.

By M. J. Perez.

Since the experiments of Chabrier, Burmeister, Landois, &c., the buzzing of insects is attributed to the vibrations of the air rubbing against the margins of the stigmatic orifices of the thorax under the action of the motory muscles of the wings. The latter organs are considered only to play a minimum part by modifying more or less the sounds produced by the respiratory orifices. I have repeated all the experiments of the above authors, and have not always arrived at the results announced by them, or I have thought that I could put upon them an interpretation different from theirs.

1. It is quite true that, by sticking together the wings of a fly (*Sarcophaga carnaria*), as Chabrier did, we do not prevent the sound from being produced, but not that the wings can thus be kept in a state of complete immobility. The flexibility of these organs